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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/954,685	09/11/2001	Alec A. Ciolac	ATI.0100720	8450
34456	7590	11/14/2003	EXAMINER	
TOLER & LARSON & ABEL L.L.P. PO BOX 29567 AUSTIN, TX 78755-9567			QUILLEN, ALLEN E	
			ART UNIT	PAPER NUMBER
			2676	
DATE MAILED: 11/14/2003				

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/954,685	CIOLAC, ALEC A.
	Examiner	Art Unit
	Allen E. Quillen	2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 04 September 2003.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-42 is/are pending in the application.

4a) Of the above claim(s) 25 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-24 and 26-42 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

***Response to Amendment***

1. Claims 9, 23, 30 amended; claim 25 cancelled. Claims 1-24, 26-42 pending. Applicant's arguments filed September 4, 2003 have been fully considered but they are not persuasive.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - a. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 5, 8, 12, 26 and 33 remain rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The terms "hot-keys" and "desktop", *in the claims*, are generic terms with multiple contextual meanings.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1-24, 26-42 are rejected under 35 U.S.C. 102(a) as being anticipated by Chiraz, U.S. Patent 6,411,302.

6. Regarding claim 23, representative of claims 1-3, 9-10, 15, 22, 24, 29, 30-31 and 42, Chiraz discloses a system comprising a data processor having an input/output buffer; memory having an input/output buffer coupled to the input/output buffer of the data processor, said memory having a program of instructions (Figure 9, elements 32, 42, 44, 54, 56, 58) including: a display driver (Column 15, lines 43-44) to: report a multiple display configuration (Column 17, lines 4-15, 40-48; Column 27, line 40; Column 22, lines 10-13), to an operating system (Column 16, lines 54-67, *Windows 95 Device Drive Kit*), wherein said multiple display configuration includes support for a plurality of virtual displays (Column 13, lines 28-30); partition a frame buffer into a plurality of frame buffer portions (Figure 4, Column 11, lines 12-14, 52-62; Column 12, lines 48-50); assign a different virtual display of the plurality of virtual displays to each of the frame buffer portions of the plurality of frame buffer portions (Column 27, lines 17-21; Figure 52, Column 47, lines 1-5); a video controller coupled to the input/output buffer of the data processor (Figure 9, elements 32, 42, 44, 54, 56, 58), said video controller having: a frame buffer having the plurality of frame buffer portions (Column 13, lines 17-20; Column 15, lines 8-10), wherein each frame buffer portion of the plurality of frame buffer portions is to store display data associated with an assigned virtual display of the plurality of virtual displays (Column 27, lines 17-21; Figure 52, Column 47, lines 1-5); and a display controller to provide display data from a frame buffer portion of the plurality of frame buffer portions to a display device (Figure 2, Column 11, lines 22-24; Figure 9, elements 32, 42, 44, 54, 56, 58); [further amended claim 23] wherein said display driver selects from the plurality of virtual displays dependent on a event trigger (*multi-key keyboard entry known as a hotkey that runs software routine that provides scroll bars for panning*, Column 21, line 58 through Column 22, line 9);

further (Claim 1) a method comprising steps of storing a first set of display data in a first portion of a frame buffer, wherein the first set of display data is associated with a first virtual display (Column 11, lines 33-35, *associated with*); storing a second set of display data in a second portion of a frame buffer, wherein the second set of display data is associated with a second virtual display (Column 11, lines 33-35, *associated with*); selecting one of the first virtual display or the second virtual display to be presented by a display device (Figure 47, Column 40, lines 45-55); when the first virtual display is selected, providing data from the first portion of the frame buffer to a display controller for presentation on the display device (see above, Column 32, lines 16-19); and when the second virtual display is selected, providing data from the second portion of the frame buffer to a display controller for presentation on the display device (see above, Column 32, lines 16-19); further (Claims 9, 30) a method and computer readable instructions (Figures 17A-element 104; Figure 17B-element 140; Figure 30, elements 268-282, Column 5, lines 29-41) comprising the steps of determining a number of virtual displays in a plurality of virtual displays to be supported (see above); partitioning a frame buffer into a plurality of frame buffer portions, wherein the plurality of frame buffer portions include a first frame buffer portion associated with a first virtual display of the plurality of virtual displays and a second frame buffer portion associated with a second virtual display of the plurality of virtual displays; reporting the number of virtual displays as a number of display devices (in a multiple display configuration) (see above); providing a first address associated with the first frame buffer portion, wherein the first address is reported as an address of a first frame buffer associated with a first (multiple) display device; and providing a second address associated with the second

frame buffer portion, wherein the second address is reported as an address of a second frame buffer associated with a second (multiple) display device (see above);

[further amended claims 9 and 30] wherein each of the number of virtual displays is to be displayed on a same display device (Column 47, lines 9-20; Column 51, lines 1-3, 12-15; Column 11, lines 14-20; Column 21, lines 40-51; Column 29, lines 35-45; Column 49, lines, 1, 39-40).

7. Regarding claim 4, representative of claims 7, 11, 14, 28, 32 and 35, Chiraz discloses a method as in Claim 1, wherein the step of selecting one of the first virtual display or the second virtual display includes identifying an event trigger (Column 16, lines 35-48).

8. Regarding claim 5, representative of claims 6, 8, 12-13, 26-27, 33-34, as best understood by the Examiner, Chiraz discloses a method as in Claim 4, wherein the event trigger includes identifying a particular hot-key from a plurality of hot-key, wherein the plurality of hot-key include a first hot-key assigned to the first virtual display and a second hot-key assigned to the second virtual display (see above, Column 1, lines 23-35; Column 2, lines 30-48).

9. Regarding claim 16, representative of claims 20, 37 and 41, Chiraz discloses a method as in Claim 15, wherein the parameters include resolution assigned to each virtual display (Column 1, lines 29-32; Column 11, lines 9-12; Column 20, lines 45-65).

10. Regarding claim 17, representative of claims 21 and 38, Chiraz discloses a method wherein the parameters included a color depth assigned to each of the virtual displays (see Column 8, line 13 (erroneously labeled as Figure 6), see Figure 5, Column 12, lines 7-8).

11. Regarding claim 18, representative of claim 19, 36, 39 and 40, Chiraz discloses a method wherein the number of display devices to be supported is based on an available size of the frame buffer and virtual display parameters (Column 16, lines 18-34; Figures 18A-D, Column 18, line 44 through Column 19, line 7); further and wherein the instructions to partition the frame buffer includes determining a space to assign a portion of the frame buffer dependent on parameters of an assigned virtual display (Column 20, lines 45-51).

#### *Response to Arguments*

12. The Applicant remarks state (page 10, 4<sup>th</sup> paragraph), "...the terms "hot-key" and "system desktop" are terms those skilled in the art would understand...when read in the light of the specification."

The Examiner respectfully replies that, *in the claims*, the generic terms lack specificity, thus are indefinite for particularly failing to point out and distinctly claim the Applicant's novel subject matter. The claim language implies that "the event trigger includes identifying a particular hot-key." The Examiner offers suggestive language, such as "user input from the keyboard or mouse" or similar descriptive language that clearly identifies what it is that is being claimed in the claims.

13. The Applicant states, regarding claim 1, “Chiraz does not disclose when a first virtual display is selected, providing data from a portion of a frame buffer to a display controller for presentation on the display device; and when the second virtual display is selected, providing data from the second portion of the frame buffer to the display controller for presentation on the display device (last paragraph, page 11).”

The Examiner respectfully replies, however, that Chiraz discloses when a first virtual display is selected, providing data from a portion of a frame buffer to a display controller for presentation on the display device; and when the second virtual display is selected, providing data from the second portion of the frame buffer to the display controller for presentation on the display device (Column 47, lines 1-29; Column 21, line 39 through Column 22, line 9).

14. The Applicant asserts on page 12, 3<sup>rd</sup> paragraph and page 14, 2d paragraph, that “Chiraz does not disclose displaying each of multiple displays on a same display device required by amended claim 9.”

The Examiner respectfully replies, however, that Chiraz discloses displaying each of multiple displays on a same display device required by amended claim 9 (Column 47, lines 9-20; Column 51, lines 1-3, 12-15; Column 11, lines 14-20; Column 21, lines 40-51; Column 29, lines 35-45; Column 49, lines, 1, 39-40).

15. Regarding claim 23, on page 13, 2d paragraph, line 5, the Applicant asserts, “Further, Chiraz does not disclose an event trigger.”

The Examiner respectfully replies, however, that Chiraz discloses an [user] event trigger (as described in the Specification page 7, lines 5-18, as predefined keystrokes or mouse cursor). Chiraz discloses event triggers such as graphical user interface (GUI), I/O, panning, zooming, crossovers, (Column 21, line 60 through Column22, line 9; Column 1, line 23 through Column 2, line 37; Column 16, lines 35-54) in the context of display control functions described by the reference.

***Conclusion***

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen E. Quillen whose telephone number is (703) 605-4584. The examiner can normally be reached on Tuesday – Friday, 8:30am – noon and 1:00 - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew C. Bella, can be reached on (703) 308-6829.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**Or FAX'd to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Sixth Floor (Receptionist), Arlington, Virginia

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number (703) 305-9600 or (703) 305-3800.

Allen E. Quillen  
Patent Examiner  
Art Unit 2676

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November 7, 2003



MATTHEW C. BELLA  
SUPERVISORY PATENT EXAMINER  
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